UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,728	01/11/2001	Elliot Schwartz	5168P001	2453

40418 7590 05/05/2005	EXAMINER
HEIMLICH LAW 5952 DIAL WAY SAN JOSE, CA 95129	MOORTHY, ARAVIND K

	ART UNIT	PAPER NUMBER
	2131	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2005*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-26* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *11 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some *   c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

DETAILED ACTION

1. This is in response to the amendment filed on 15 February 2005.

2. Claims 1-26 are pending in the application.

3. Claims 1-26 have been rejected.

Response to Arguments

4. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view

of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

5.   Claims 1-4, 10, 12, 14-16 and 22-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Crump et al U.S. Patent No. 6,484,206 B2.

As to claims 1, 14 and 22, Crump et al discloses a method for traversing a firewall, comprising:

initiating a first connection [column 4, lines 5-33];

evaluating the first connection for a response from a remote system indicating a successful first connection [column 4, lines 5-33];

initiating a second connection if a successful first connection is not established [column 4, lines 5-33];

evaluating the second connection for a response from a remote system indicating a successful second connection [column 4, lines 5-33];

initiating a third connection if a successful second connection is not established [column 4, lines 5-33]; and

evaluating the third connection for a response from a remote system indicating a successful third connection [column 4, lines 5-33].

As to claims 2, 15 and 23, Crump et al discloses that the first connection, the second connection, and the third connection is selected from the group consisting of Transmission Control Protocol (TCP) connection, User Datagram Protocol (UDP) connection, hypertext transfer protocol (HTTP) connection, hypertext transfer protocol (HTTP) connection via a proxy connection, and Internet Control Message Protocol (ICMP) connection [column 5, lines 12-32].

As to claim 3, Crump et al discloses that initiating a TCP connection comprises initiating a TCP connection to a predefined address and port [column 5, lines 12-32].

As to claim 10, Crump et al discloses using Internet Protocol (IP) [column 5, lines 12-32].

As to claim 12, Crump et al discloses using Ethernet with the Transmission Control Protocol (TCP) [column 5, lines 12-32].

6. Claims 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Qu et al U.S. Patent No. 6,854,063 B1.

As to claim 17, Qu et al discloses a firewall traversal system comprising:

a main system coupled to storage [column 5, lines 9-27];

a communication subsystem coupled to the main system and a communication medium [column 5, lines 9-27];

a packet examining subsystem coupled to the communication subsystem [column 5, lines 34-50]; and

a database system coupled to the packet examining subsystem and the main system [column 6, lines 13-27].

As to claim 18, Qu et al discloses that the packet examining subsystem extracts port information [column 6, lines 28-44].

As to claim 19, Qu et al discloses that the packet examining subsystem extracts the port information based upon examining packet data content [column 6, lines 28-44].

As to claim 20, Qu et al discloses that the packet examining subsystem extracts address information [column 6, lines 28-44].

As to claim 21, Qu et al discloses that the packet examining subsystem extracts the address information based upon examining packet data content [column 6, lines 28-44].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al U.S.

Patent No. 6,484,206 B2 as applied to claim 1 above, and further in view of Bhide et al U.S.

Patent No. 5,852,717.

As to claim 4, Crump et al does not teach initiating a HTTP connection that comprises

initiating a HTTP connection to a predefined address using port 80.

Bhide et al teaches initiating a HTTP connection that comprises initiating a HTTP

connection to a predefined address using port 80 [column 5, lines 9-21].

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Crump et al so that if a HTTP connection were to

initiate between a client and server, it would have used a predefined address using port 80.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Crump et al by the teaching of Bhide et al because it is

well known in the art that a HTTP connection uses port 80. Establishing a connection involves

one round-trip time from the client to the server as the client requests to open a network

connection and the server responds that a network connection has been opened [column 5, lines

9-21].

8. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al

U.S. Patent No. 6,484,206 B2 as applied to claim 1 above, and further in view of Fuh et al

U.S. Patent No. 6,609,154 B1.

As to claims 5-7 and 9, Crump et al does not teach that initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address and port. Crump et al does not teach that determining a likely proxy address and port further comprises packet sniffing. Crump et al does not teach that packet sniffing further comprises: sampling packets; extracting information from the sampled packets; and building a database of likely proxy addresses and ports. Crump et al does not teach that extracting information from the sampled packets comprises examining TCP packets for HTTP data.

Fuh et al teaches initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address and port [column 13, lines 3-14]. Fuh et al teaches that determining a likely proxy address and port further comprises packet sniffing [column 9, lines 51-67]. Fuh et al teaches that packet sniffing further comprises: sampling packets; extracting information from the sampled packets; and building a database of likely proxy addresses and ports [column 9, lines 51-67]. Fuh et al teaches that extracting information from the sampled packets comprises examining TCP packets for HTTP data [column 9, lines 51-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Crump et al so that there would have been a HTTP connection initiated via a proxy connection that would have determined a likely proxy address and port. Packet sniffing would have occurred during the determining step of the proxy address and port. The firewall packet sniffing would have included sampling packets, extracting

information from the packets and building a database of likely proxy addresses and ports. The

extracted information would have come from examining TCP packets for HTTP data.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Crump et al by the teaching of Fuh et al because it makes

sure that the client is authorized to communicate with a network resource [column 3, lines 54-

60].

As to claim 8, Crump et al teaches that extracting information from the sampled packets

comprises extracting TCP port information [column 5, lines 47-67].

9. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crump

et al U.S. Patent No. 6,484,206 B2 as applied to claim 1 above, and further in view of Fuh et

al U.S. Patent No. 6,609,154 B1.

As to claims 11 and 13, Crump et al does not teach that initiating a HTTP connection via

a proxy connection further comprises determining a likely proxy address by sampling packets

and extracting IP and Ethernet addresses.

Fuh et al teaches initiating a HTTP connection via a proxy connection further comprises

determining a likely proxy address by sampling packets and extracting IP and Ethernet addresses

[column 9, lines 51-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Crump et al so that a HTTP connection would

have been initiated via a proxy connection and proxy addresses would have been d3etermined by

sampling packets and extracting IP and Ethernet address.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Crump et al by the teaching of Fuh et al because it makes

sure that the client is authorized to communicate with a network resource [column 3, lines 54-

60].

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al

U.S. Patent No. 6,484,206 B2 as applied to claim 14 above, and further in view of Linden et

al U.S. Patent No. 6,549,773 B1.

As to claim 16, Crump et al teaches examining network traffic [column 5, lines 47-67].

Crump et al does not teach building a database of parameters likely to allow

establishment of a HTTP connection via a proxy connection.

Linden et al teaches building a database of parameters likely to allow establishment of a

HTTP connection via a proxy connection [column 5, lines 16-26].

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Crump et al so that a database would have been

built of parameters likely to allow establishment of a HTTP connection via a proxy connection.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Crump et al by the teaching of Linden et al because it is

possible to efficiently utilize functions connected with the HTTP data transmission protocol of

the WSP/B protocol already known as such. These include, for example, GET, PUT, and POST

requests. Consequently, the header fields of the HTTP protocol can also be utilized in the data

transmission, as well as the headers of the HTTP protocol for authentication. Correspondingly, it

is possible to utilize efficiently the methods of the WWW communication network for authorization or data transmission [column 5, lines 16-26].

11. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al U.S. Patent No. 6,484,206 B2 as applied to claim 22 above, and further in view of Fuh et al U.S. Patent No. 6,609,154 B1.

As to claims 24 and 25, Crump et al does not teach means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by sniffing packets and extracting information from the packets. Crump et al does not teach means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by receiving information from a computer connected to the firewall.

Fuh teaches means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by sniffing packets and extracting information from the packets [column 9, lines 51-67]. Fuh teaches means for initiating a HTTP connection via a proxy connection further comprises determining a likely proxy address by receiving information from a computer connected to the firewall [column 9, lines 51-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Crump et al so that a HTTP connection would have been initiated via a proxy connection. The firewall would have sniffed packets and extracted information from the packets. Proxy addresses would have been determined by receiving information from the computer connected to the firewall.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Crump et al by the teaching of Fuh et al because it makes

sure that the client is authorized to communicate with a network resource [column 3, lines 54-60].

12. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crump et al U.S. Patent No. 6,484,206 B2 as applied to claim 22 above, and further in view of Montenegro U.S. Patent No. 6,233,688 B1.

As to claim 26, Crump et al does not teach means for updating firewall traversal strategies.

Montenegro teaches means for updating firewall traversal strategies [column 6, lines 49-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Crump et al so that there would have been a firewall that had means for updated firewall traversal strategies.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Crump et al by the teaching of Montenegro because it keeps the firewall up to date as far as addressed to block so that the client is not compromised at any time [column 2, lines 7-21].

Conclusion

13.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793.

The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy
April 28, 2005

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